### COMBINED DECLARATION AND POWER OF ATTORNEY IN ORIGINAL APPLICATION

ATTORNEY DOCKET No.: F-7995

I declare: that my residence and citizenship are as stated below next to my name; that I believe I am the original, first, and sole inventor (if only I am named below) or joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought in the specification attached hereto entitled:

#### METHOD OF DESIGNING A MULTI-STAGE COMPRESSOR ROTOR

that I have reviewed and understand the contents of the above-identified specification, including the claims; that I acknowledge the duty to disclose the Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. §1.56; that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

I appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

JOHN SWIATOCHA (Registration No. 27,955)

CHARLES E. SOHL (Registration No. 27,051)

RONALD G. CUMMINGS (Registration No. 28,405)

STEPHEN A. SCHNEEBERGER (Registration No. 25,434)

Direct All Correspondence to:

STEPHEN A. SCHNEEBERGER

Pratt & Whitney

Patent Department - MS 132-13

400 Main Street

East Hartford, CT 06108

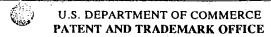
Telephone: (860) 565-5106

Fax: (860) 565-9276

	Secretary of the second	the many and the design of the second section in the second
FULL NAME OF SOLE OR FIRST INVENTOR	INVENTION SIGNATURE	DATE
John J. Marra	John J. Mana	16 Dec 99
RESIDENCE AND POST OFFI	CEADDRESS	CITIZENSHIP
18270 River Oaks Drive, Jupiter, Florida 33458		U.S.A.
FULL NAME OF SECOND JOINT INVENTOR (IF ANY)	INVENTOR'S SIGNATURE	DATE
Jonathan D. Schmid	Mathen 1/2 Ochman	17 DEC 99
RESIDENCE AND POST OFFICE ADDRESS		CITIZENSHIP
7011 Edgemere Terrace, Palm Beach Gardens, Florida 33410-2183		U.S.A.

Page 2 of 2

FULL NAME OF THIRD JOINT INVENTOR (IF ANY)	Inventor's Signature	DATE
Steven P. Kuzmeski	3AP Sali	12/14/99
RESIDENCE AND POST OFFICE ADDRESS		CITIZENSHIP
134 Croft Drive, Manchester, Connecticut 06040-1622		U.S.A.
FULL NAME OF FOURTH JOINT INVENTOR (IF ANY)	Inventor's Signature	DATE
David A. Borzillo	David a. Bongth	12/19/99
RESIDENCE AND POST OFFICE ADDRESS		CITIZENSHIP
6342 Foster Street, Jupiter, Florida 33458		U.S.A.
s\dss\sas\Declaration\F-7995		



# PATENTS ONLY

To The Honorable Commissioner of Patents & Trademarks: Please record the attached original documents or copy thereof.	
John J. Marra 18270 River Oaks Drive	UNITED TECHNOLOGIES CORPORATION Hartford, Connecticut 06101
Jupiter, Florida 33458 U.S.A.	A Corporation of Delaware
Assignment Execution Date: 16 December 1999	
Additional name(s) of conveying party(ies) attached?   Yes	
3. Nature of conveyance:	
■ Assignment □ Security □ Agreement □ Merger □ Change of Name □ Other	Additional name(s) & address(es) attached?
4. Application number(s) or patent number(s): Attorney	
This document is being filed together with a new application December 16, 1999; December 17, 1999, December 14, 1  Patent Application Title: "Method of Designing a Multi-	999; December 17, 1999, respectively.
Additional number attac	ched?  NO
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total Number of applications and patents involved: 1
Name: Stephen A. Schneeberger Address: Pratt & Whitney Patent Department - MS 132-13 400 Main Street East Hartford, CT 06108	
	7. Total fee (37 C.F.R. § 3.41) \$40.00
	Enclosed: <u>NO</u>
	Authorized to be charged to deposit account: <u>YES</u>
	8. Deposit Account Number 21-0270, Order No.: F-7995
DO NOT USE TI	HIS SPACE
9. Statement and signature.	•
To the best of my knowledge and belief, the foregoing in copy is a true copy of the original document.  STEPHEN A. SCHNEEBERGER NAME OF PERSON SIGNING S	formation is true and correct and any attached    Comparison   Compari

Docket Number: F-7995

### U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

# RECORDATION FORM COVER SHEET PATENTS ONLY

1. Name of Conveying party(ies) continued:

Jonathan D. Schmid 7011 Edgemere Terrace Palm Beach Gardens, Florida 33410-2183 U.S.A.

Assignment Execution Date: 17 December 1999

Steven P. Kuzmeski 134 Croft Drive Manchester, Connecticut 06040-1622 U.S.A.

Assignment Execution Date: 14 December 1999

David A. Borzillo 6342 Foster Street Jupiter, Florida 33458 U.S.A.

Assignment Execution Date: 14 December 1999

s:\dss\sas\pto\_1595\F-7995

#### **ASSIGNMENT**

WHEREAS, We, John J. Marra of Jupiter, Florida; Jonathan D. Schmid of Palm Beach Gardens, Florida; Steven P. Kuzmeski of Manchester, Connecticut; and David A. Borzillo of Jupiter, Florida, have invented certain improvements in "Method of Designing a Multi-Stage Compressor Rotor" identified as Attorney Docket No. F-7995, and described in a patent application executed by the undersigned on the date(s) set after the signature(s) hereto, being owner(s) of all right, title and interest in and to said application and in and to any invention described therein, free from all prior assignments, agreements, licenses, mortgages, or other encumbrances whatsoever, and having full right to convey the entire interest both legal and equitable herein assigned; and

WHEREAS, UNITED TECHNOLOGIES CORPORATION, of Hartford, Connecticut, a corporation of the State of Delaware (assignee) is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged by the undersigned, the undersigned does (do) hereby sell, assign, transfer and set over unto said assignee, its successors and assigns, the entire right, title and interest in and to said invention or inventions, as described in the aforesaid application, in any form or embodiment thereof, and in and to the aforesaid application; and in and to any application filed in any foreign country based thereon, including the right to file said foreign applications under the provisions of the International Convention; also the entire right, title and interest in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon said invention or inventions and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention or inventions in this or any foreign country; and the undersigned hereby authorize(s) and request(s) the issuing authority to issue any and all patents on said application or applications to said assignee or its successors and assigns.

The undersigned further agree(s), without any further payment or compensation by said assignee or its successors and assigns, to communicate to said assignee, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings whenever requested; testify in any interference or other legal proceedings, whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said assignee, its successors or assigns and nominees to obtain and enforce proper patent protection for said invention or inventions in this or any foreign country.

IN TESTIMONY WHEREOF, the undersigned has(have) hereunto set his(their) hand(s) and seal(s) on the data after his(their) signature(s).

(L.S.)

JOHNA. MARRA

(L.S.)

JOHNA. MARRA

(L.S.)

JOHNA. MARRA

IT DECEMBER 1999

STEVEN P. KUZMESKI

(L.S.)

December 14, 1999

DAVID A. BORZILLO

Attorney Docket No. F-7995		
State of Florida ) ss: Jobiter County of Palm Beach		
On this 16th day of December appeared JOHN J. MARRA to me personally k		
Richard W. Whiting MY COMMISSION & CC542560 EXPIRES June 19, 2000 BOHOED THEN THOM FAIN INSURANCE, BOD.	Richard W. Whity Notary Public	
	Commissioner of the Superior Court wolars	
SEAL	My Commission Expires: June 19,2000	
State of Hounda )		
State of Flouida ) ss: Palm Beach Gaudens County of Palm Beach		
County of Tallin Ceacy		
	, 1999 before me personally sonally known, and known to me to be the	
On this 17 th day of December appeared JONATHAN D. SCHMID to me per person(s) who signed the foregoing assignment his(their) free act and deed.  Richard W. Whiting MY COMMISSION # CC542550 EXPIRES June 19, 2000	, 1999 before me personally sonally known, and known to me to be the	
On this 17th day of <u>December</u> appeared <u>JONATHAN D. SCHMID</u> to me per person(s) who signed the foregoing assignment his(their) free act and deed.  Richard W. Whiting  MY COMMISSION # CC542550 EXPIRES	, 1999 before me personally sonally known, and known to me to be the , and acknowledged the signing of same as	
On this 17 th day of December appeared JONATHAN D. SCHMID to me per person(s) who signed the foregoing assignment his(their) free act and deed.  Richard W. Whiting MY COMMISSION # CC542550 EXPIRES June 19, 2000	, 1999 before me personally sonally known, and known to me to be the , and acknowledged the signing of same as  Richard W. Whiling  Notary Public	
On this 17th day of December appeared JONATHAN D. SCHMID to me per person(s) who signed the foregoing assignment his(their) free act and deed.  Richard W. Whiting MY COMMISSION # CC542550 EXPIRES JUNE 19, 2000 BOXDED THRU TROY FAM WISURANCE, INC.  SEAL  State of Connecticut  Secret Harri- County of Harrford)  On this 14 4h day of December		
On this 17th day of December appeared JONATHAN D. SCHMID to me per person(s) who signed the foregoing assignment his(their) free act and deed.  Richard W. Whiting MY COMMISSION # CC542550 EXPIRES JURIS 19, 2000 BONDED THRU TROY FAM INSURANCE, INC.  SEAL  State of Connecticut  Section 1, 2000 Section 1, 2000 Source 1, 2000 Section 2, 2000 Section 2, 2000 Section 3, 2000 Section 2, 2000 Section 3,	, 1999 before me personally sonally known, and known to me to be the and acknowledged the signing of same as    Richard W. Whiling     Notary Public     Commissioner of the Superior Court     My Commission Expires:	
On this ITHA day of December appeared JONATHAN D. SCHMID to me per person(s) who signed the foregoing assignment his(their) free act and deed.  Richard W. Whiting MY COMMINSSION & CC542550 EXPIRES JUNE 19, 2000 BONDED THRU TROY FAIN INSURANCE, INC.  SEAL  State of Connecticut   SS: East Harrie County of Harrieral day of December appeared STEVEN P. KUZMESKI to me persperson(s) who signed the foregoing assignment	, 1999 before me personally sonally known, and known to me to be the and acknowledged the signing of same as    Richard W. Whiling     Notary Public     Commissioner of the Superior Court     My Commission Expires:	

Commissioner of the Superior Court

My Commission Expires: May 31, 2002

Page Three
Attorney Docket No. F-7995

State of Florida

ss: Palm Beach Gardens

County of Palm Beach

On this 17th day of December, 1999 before me personally appeared DAVID A. BORZILLO to me personally known, and known to me to be the person(s) who signed the foregoing assignment, and acknowledged the signing of same as his(their) free act and deed.



Richard W. Whiting
MY COMMISSION # CC542550 EXPIRES
Jume 19, 2000
BONDED THOU TROY FAIR INSURANCE, INC.

Richard W. Whiting Notary Public

-Commissioner of the Superior Court

SEAL

My Commission Expires: Jone 19, 2000

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RE		
MUS 6.2456 1012456	§97	
To The Honorable Commissioner of Patents & Trademarks: Please record the attached original documents or copy thereof.		
1. Name of Conveying party(ies):	2. Name and address of receiving party(ies):	
John J. Marra 18270 River Oaks Drive	UNITED TECHNOLOGIES CORPORATION Hartford, Connecticut 06101	
Jupiter, Florida 33458 U.S.A.	A Corporation of Delaware	
Assignment Execution Date: 16 December 1999	O La La Caracteria de l	
Additional name(s) of conveying party(ies) attached?	6914 6914	
	09/4	
3. Nature of conveyance:	Ď.	
■ Assignment		
☐ Change of Name ☐ Other	Additional name(s) & address(es) attached?   NO	
4. Application number(s) or patent number(s): Attorney	Docket Number: F-7995	
This document is being filed together with a new application, the execution date of the application is December 16, 1999; December 17, 1999, December 14, 1999; December 17, 1999, respectively.		
Patent Application Title: "Method of Designing a Multi-		
1991 4694 Additional number atta	ched? 🖪 NO	
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total Number of applications and patents involved: 1	
Name: Stephen A. Schneeberger		
Address: Pratt & Whitney		
Patent Department - MS 132-13		
400 Main Street East Hartford, CT 06108		
East Harrior of Ca vorco	7. Total fee (37 C.F.R. § 3.41) \$40.00	
	Enclosed: NO	
	Authorized to be charged to deposit account:	
	YES 중 8. Deposit Account Number 21-6270, Order No.: F-7995	
DO NOT USE TI		
	HIS SPACE	
9. Statement and signature.	<b>X S O</b>	
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.		
STEPHEN A. SCHNEEBERGER  NAME OF PERSON SIGNING  SIGNATURE  DATE		

### U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

# RECORDATION FORM COVER SHEET PATENTS ONLY

1. Name of Conveying party(ies) continued:

Jonathan D. Schmid 7011 Edgemere Terrace Palm Beach Gardens, Florida 33410-2183 U.S.A.

Assignment Execution Date: 17 December 1999

Steven P. Kuzmeski 134 Croft Drive Manchester, Connecticut 06040-1622 U.S.A.

Assignment Execution Date: 14 December 1999

David A. Borzillo 6342 Foster Street Jupiter, Florida 33458 U.S.A.

Assignment Execution Date: 14 December 1999

s:\dss\sas\pto\_1595\F-7995

#### ASSIGNMENT

WHEREAS, We, John J. Marra of Jupiter, Florida; Jonathan D. Schmid of Palm Beach Gardens, Florida; Steven P. Kuzmeski of Manchester, Connecticut; and David A. Borzillo of Jupiter, Florida, have invented certain improvements in "Method of Designing a Multi-Stage Compressor Rotor" identified as Attorney Docket No. F-7995, and described in a patent application executed by the undersigned on the date(s) set after the signature(s) hereto, being owner(s) of all right, title and interest in and to said application and in and to any invention described therein, free from all prior assignments, agreements, licenses, mortgages, or other encumbrances whatsoever, and having full right to convey the entire interest both legal and equitable herein assigned; and

WHEREAS, UNITED TECHNOLOGIES CORPORATION, of Hartford, Connecticut, a corporation of the State of Delaware (assignee) is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged by the undersigned, the undersigned does (do) hereby sell, assign, transfer and set over unto said assignee, its successors and assigns, the entire right, title and interest in and to said invention or inventions, as described in the aforesaid application, in any form or embodiment thereof, and in and to the aforesaid application; and in and to any application filed in any foreign country based thereon, including the right to file said foreign applications under the provisions of the International Convention; also the entire right, title and interest in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon said invention or inventions and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention or inventions in this or any foreign country; and the undersigned hereby authorize(s) and request(s) the issuing authority to issue any and all patents on said application or applications to said assignee or its successors and assigns.

The undersigned further agree(s), without any further payment or compensation by said assignee or its successors and assigns, to communicate to said assignee, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings whenever requested; testify in any interference or other legal proceedings, whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said assignee, its successors or assigns and nominees to obtain and enforce proper patent protection for said invention or inventions in this or any foreign country.

IN TESTIMONY WHEREOF, the undersigned has(have) hereunto set his(their) hand(s) and seal(s) on the date after his(their) signature(s).

(L.S.)

JOHNA. MARRA

(L.S.)

JONATHAN D. SCHMID

(L.S.)

STEVEN P. KUZMESKI

(L.S. Mavid A. Bondo

December 17, 1999

DAVID A. BORZIĽLO

Page Two Attorney Docket No. F-7995	
State of Florida ) ss: Jobiter County of Palm Beach	
On this 16th day of December appeared JOHN J. MARRA to me personally	, 1999 before me personally known, and known to me to be the person(s) nowledged the signing of same as his(their) free
Richard W. Whiting MY COMMISSION # CC542550 EXPIRES June 19, 2000 BORDED THRU TROY FAIN INSURANCE, INC.	Richard W. Whiting Notary Public
SEAL	My Commission Expires: June 19,2000
State of Florida )  SS: Palm Beach Gz.  County of Palm Beach  On this 17th day of December appeared JONATHAN D. SCHMID to me per person(s) who signed the foregoing assignmen his(their) free act and deed.  Richard W. Whiting  MY COMMISSION # CC542550 EXPIRES  June 19, 2000  BONDED THRU TROY FAIN INSURANCE, INC.	, 1999 before me personally esonally known, and known to me to be the
SEAL	Commissioner of the Superior Court  My Commission Expires:
State of Connecticut; ss: East Harry County of Harryord;	
On this 14 4k day of 200 be appeared STEVEN P. KUZMESKI to me person(s) who signed the foregoing assignment his(their) free act and deed.	nd acknowledged the signing of same as
	Notary Public  -Commissioner of the Superior Court

My Commission Expires: May 31, 2002

Page Three Attorney Docket No. F-7995

State of Florida

ss: Palm Beach Gardens

County of Palm Beach

On this 1714, day of <u>Fto December</u>, 1999 before me personally appeared <u>DAVID A. BORZILLO</u> to me personally known, and known to me to be the person(s) who signed the foregoing assignment, and acknowledged the signing of same as his(their) free act and deed.



Richard W. Whiting
MY COMMISSION # CC542550 EXPIRES
June 19, 2000
BONDED THRU TROY FAIM HISTORAGE INC.

Richard W. Whiting Notary Public

-Commissioner of the Superior Court-

SEAL

My Commission Expires: June 19, 2000

s:\dss\sas\assignment\F-7995